

within 60 days of the date of publication of this proposal. Such requests must be made in writing (includes facsimile) and addressed to Skip Ambrose (see ADDRESSES section).

#### National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment or Environmental Impact Statement, as defined under authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to Section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* on October 25, 1983 (48 FR 49244).

#### References Cited

A complete list of all the references cited herein, as well as others, is available upon request from the Fairbanks Ecological Services Field Office (see ADDRESSES section).

#### Authors

The primary authors of this notice are Skip Ambrose, Janey Fadely, Ted Swem, and Lori Quakenbush (see ADDRESSES section), and Jean Fitts Cochrane, Anchorage Ecological Services, 605 West 4th Avenue, Anchorage, Alaska, 99501 (907) 271-2778.

#### List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

#### Proposed Regulation Promulgation

#### PART 17—[AMENDED]

Accordingly, the Service hereby proposes to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500, unless otherwise noted.

2. Section 17.11(h) is amended by adding the following, in alphabetical order under Birds, to the listing of Endangered and Threatened Wildlife:

#### § 17.11 Endangered and threatened wildlife.

\* \* \* \* \*

(h) \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
BIRDS							
Eider, Steller's .....	<i>Polysticta stelleri</i> ....	U.S.A. (AK), Russia	U.S.A. (AK breeding population only).	T .....		NA	NA

Dated: July 5, 1994.

Mollie H. Beattie,

Director, Fish and Wildlife Service.

[FR Doc. 94-17132 Filed 7-13-94; 8:45 am]

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#### 50 CFR Part 17

RIN 1018-AC54

#### Endangered and Threatened Wildlife and Plants; Proposal to List the Cumberland Elktoe, Oyster Mussel, Cumberlandian Combshell, Purple Bean, and Rough Rabbitsfoot as Endangered Species

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

**SUMMARY:** The Fish and Wildlife Service (Service) proposes to list five freshwater mussels (Cumberland elktoe (*Alasmidonta atropurpurea*), oyster mussel (*Epioblasma capsaeformis*), Cumberlandian combshell (*Epioblasma brevidens*), purple bean (*Villosa perpurpurea*), and rough rabbitsfoot (*Quadrula cylindrica strigillata*)) as endangered species under the

Endangered Species Act of 1973, as amended (Act). All five species have undergone significant reductions in range and now exist as relatively small, isolated populations. The Cumberland elktoe exists in very localized portions of the Cumberland River system in Kentucky and Tennessee. The oyster mussel and Cumberlandian combshell persist at extremely low numbers in portions of the Cumberland and Tennessee River basins in Kentucky, Tennessee, and Virginia. The purple bean and rough rabbitsfoot currently survive in a few river reaches in the Tennessee River system in Tennessee and Virginia. These species were historically eliminated from much of their range by impoundments. Presently, they and their habitat are impacted by deteriorated water quality, primarily resulting from poor land use practices.

**DATES:** Comments from all interested parties must be received by September 12, 1994. Public hearing requests must be received by August 29, 1994.

**ADDRESSES:** Comments and materials concerning this proposal should be sent to the Field Supervisor, U.S. Fish and

Wildlife Service, Asheville Field Office, 330 Ridgefield Court, Asheville, North Carolina 28806 (704/665-1195).

Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

**FOR FURTHER INFORMATION CONTACT:** Mr. Richard G. Biggins at the above address or telephone (704/665-1195, Ext. 228).

#### SUPPLEMENTARY INFORMATION:

##### Background

Cumberland Elktoe (*Alasmidonta atropurpurea*)

The Cumberland elktoe, described by Rafinesque (1831), has a thin but not fragile shell. The shell's surface is smooth, somewhat shiny, and covered with greenish rays. Young specimens have a yellowish-brown shell and the shells of adults are generally black. The inside of the shell is shiny with a white, bluish-white, or sometimes peach or salmon color. (See Clarke (1981) for a more complete description of species.)

The Cumberland elktoe is endemic to the Cumberland River system in Tennessee and Kentucky and is considered endangered in the State of

Kentucky (Kentucky State Nature Preserve Commission 1991). Historic records exist from the Cumberland River and from Cumberland River tributaries entering from the south between the Big South Fork Cumberland River upstream to Cumberland Falls. Specimens have also been taken from Marsh Creek above Cumberland Falls. Old records of a related species, *Alasmidonta marginata*, exist from other creeks above Cumberland Falls; and there is speculation that these specimens were probably the Cumberland elktoe (Gordon 1991). Because the area above the falls has been severely impacted by coal mining, any populations of *A. atropurpurea* that might have existed there were likely lost (Gordon 1991). A record of one fresh dead specimen exists from the Collins River, Grundy County, Tennessee. However, extensive searches of the collection site and other sites in the Collins River and adjacent rivers have failed to find another specimen. If the species did exist in the Collins River, it has likely been extirpated.

Presently, three populations of the Cumberland elktoe are known to persist. The species survives in the middle sections of Rock Creek, McCreary County, Kentucky; the upper portions of the Big South Fork Cumberland River basin in McCreary County, Kentucky, and Scott, Fentress, and Morgan Counties, Tennessee; and in Marsh Creek, McCreary County, Kentucky (Gordon 1991).

Any Cumberland elktoe populations that may have existed in the main stem of the Cumberland River were likely lost when Wolf Creek Dam was completed. Other tributary populations were likely lost due to the impacts of coal mining, pollution, and spills from oil wells. The upper Big South Fork basin population is threatened by coal mining and could be threatened by an impoundment that is under consideration for a tributary (the North Prong of Clear Fork Creek) in the basin. The Marsh Creek population has been adversely affected and is still threatened by spills from oil wells. The Rock Creek population could be threatened by logging. All three populations, especially Rock Creek and Marsh Creek, are restricted to such short stream reaches that they could be eliminated by toxic chemical spills.

#### Oyster Mussel (*Epioblasma capsaeformis*)

The oyster mussel (Lea 1834) has a dull to sub-shiny yellowish to green colored shell with numerous narrow dark green rays. The shells of females are slightly inflated and quite thin towards the shell's posterior margin. The inside of the shell is whitish to

bluish-white in color. (See Johnson (1978) for a more complete description of species.) The species is considered endangered in the States of Kentucky (Kentucky State Nature Preserve Commission 1991) and Virginia (Neves 1991; Sue Bruenderman, Virginia Department of Game and Inland Fisheries, *in litt.*, 1992).

This species historically occurred throughout much of the Cumberlandian region of the Tennessee and Cumberland River drainages in Alabama, Kentucky, Tennessee, and Virginia (Gordon 1991), and Ortmann (1918) considered the species to be very abundant in the upper Tennessee River drainage.

Currently, within the Cumberland River, the oyster mussel survives as a very rare component of the benthic community in Buck Creek, Pulaski County, Kentucky; and it still survives in a few miles of the Big South Fork Cumberland River, McCreary County, Kentucky, and Scott County, Tennessee (Bakaletz 1991). Within the Tennessee River system, only small populations survive at a few sites in the Powell River, Lee County, Virginia and Hancock and Claiborne Counties, Tennessee; in the Clinch River system, Scott County, Virginia, and Hancock County, Tennessee; Copper Creek (a Clinch River tributary), Scott County, Virginia; and Duck River, Marshall County, Tennessee. Although not seen in recent years, the species may still persist at extremely low numbers in the lower Nolichucky River, Cocke and Hamblen Counties, Tennessee, and in the Little Pigeon River, Sevier County, Tennessee (Gordon 1991).

Much of the oyster mussel's historic range has been impounded by the Tennessee Valley Authority (TVA) and the U.S. Army Corps of Engineers (Corps). Other populations were lost due to various forms of pollution and siltation. The present populations are threatened by the adverse impacts of coal mining, poor land use practices, and pollution, primarily from non-point sources. The Duck River population could be lost if the proposed Columbia Dam on the Duck River at Columbia, Tennessee, is completed as presently proposed. All the known populations are small and could be decimated by toxic chemical spills.

#### Cumberlandian Combshell (*Epioblasma brevidens*)

The Cumberlandian combshell (Lea 1831) has a thick, solid shell with a smooth to cloth-like outer surface. It is yellow to tawny-brown in color with narrow green broken rays. The inside of the shell is white. The shells of females

are inflated with serrated teeth-like structures along a portion of the shell margin. (See Johnson (1978) for a more complete description of species.) The species is considered endangered in the States of Kentucky (Kentucky State Nature Preserve Commission 1991) and Virginia (Neves 1991; Bruenderman, *in litt.*, 1992) and a species of special concern in Tennessee (Bogan and Parmalee 1983).

The Cumberlandian combshell historically existed throughout much of the Cumberlandian portion of the Tennessee and Cumberland River systems in Alabama, Kentucky, Tennessee, and Virginia (Gordon 1991). Presently, it survives in the Cumberland River basin, as a very rare component of the benthic community in Buck Creek, Pulaski County, Kentucky, and in a few miles of the Big South Fork Cumberland River, McCreary County, Kentucky, and Scott County, Tennessee (Bakaletz 1991). A few old, non-reproducing individuals may also survive in Old Hickory Reservoir on the Cumberland River, Smith County, Tennessee (Gordon 1991).

Within the Tennessee River basin, the species still survives in very low numbers in the Powell and Clinch Rivers, Lee and Scott Counties, Virginia; and Claiborne and Hancock Counties, Tennessee. The Clinch and Powell River populations are very small and in decline (Neves 1991; Richard Neves, Virginia Cooperative Fish and Wildlife Research Unit, personal communication, 1991).

Many of the Cumberlandian combshell's historic populations were lost when impoundments were constructed on the Tennessee and Cumberland Rivers by TVA and the Corps. Other populations were lost due to various forms of pollution and siltation. The present populations are threatened by the adverse impacts of coal mining, poor land use practices, and pollution, primarily from non-point sources. All the known populations are small and could be decimated by toxic chemical spills.

#### Purple Bean (*Villosa perpurpurea*)

The purple bean mussel (Lea 1861) has a small to medium-sized shell. The shell's outer surface is usually dark brown to black with numerous closely-spaced fine green rays. The inside of the shell is purple, but the purple may fade to white in dead specimens. (See Bogan and Parmalee (1983) for a more complete description of species.) The species is considered endangered in Tennessee (Bogan and Parmalee 1983) and Virginia (Neves 1991; and Bruenderman, *in litt.*, 1992).

The purple bean historically occupied the upper Tennessee River basin in Tennessee and Virginia upstream of the confluence of the Clinch River (Gordon 1991). Ortmann (1918) considered the species "not rare" in Virginia. Presently, it survives in limited numbers at a few locations in the upper Clinch River, Scott, Tazewell, and Russell Counties, Virginia; Copper Creek (a Clinch River tributary), Scott County, Virginia; Obed River, Cumberland and Morgan Counties, Tennessee; Emory River just below its confluence with the Obed River, Morgan County, Tennessee; and Beech Creek, Hawkins County, Tennessee (Gordon 1991).

The purple bean populations in the lower Clinch, Powell, and Holston River were extirpated by reservoirs. The decline of the species throughout the rest of its range was likely due to the adverse impacts of coal mining, poor land use practices, and pollution, primarily from non-point sources. The population centers that remain are so limited that they are very vulnerable to toxic chemical spills.

#### Rough Rabbitsfoot (*Quadrula cylindrica strigillata*)

The rough rabbitsfoot (Wright 1898) has an elongated heavy, rough textured, yellow to greenish colored shell. The shell's surface is covered with green rays, blotches, and chevron patterns. The inside of the shell is silvery to white with an iridescence in the posterior area of the shell. (See Bogan and Parmalee (1983) for a more complete species' description.) The species is considered threatened in Virginia (Neves 1991; Bruenderman, *in litt.*, 1992) and a species of special concern in Tennessee (Bogan and Parmalee 1983).

Historically, this mussel was restricted to the upper Tennessee River basin in the Clinch, Powell, and Holston River systems (Gordon 1991). It still survives in all three of these systems, but only in limited areas and at low population levels. Populations persist in the Powell River, Lee County, Virginia; and Claiborne and Hancock Counties, Tennessee; Clinch River, Scott County, Virginia, and Hancock County, Tennessee; Copper Creek (a Clinch River tributary), Scott County, Virginia; and North Fork Holston River, Washington County, Virginia (Gordon 1991).

The rough rabbitsfoot populations in the lower Clinch, Powell, and Holston River systems were extirpated by reservoirs. The decline of the species throughout the rest of its range was likely due to the adverse impacts of coal mining, poor land use practices, and

pollution, primarily from non-point sources. The population centers that remain are so limited that they are vulnerable to extirpation from toxic chemical spills.

In the Service's notice of review for animal candidates, published in the Federal Register of November 21, 1991 (56 FR 58804), the Cumberland elktoe, oyster mussel, Cumberlandian combshell, purple bean, and rough rabbitsfoot are included as category 2 species. A category 2 species is one that is being considered for possible addition to the Federal List of Endangered and Threatened Wildlife. These mussels were approved for elevation to category 1 candidate status by the Service on August 30, 1993. A category 1 species is a species for which the Service has sufficient information to propose it for protection under the Act. On August 25, 1992, the Service notified, by mail (129 letters), potentially affected Federal and State agencies and local governments within the species' present range, and interested individuals that a status review of the above mentioned five mussels and the slabside pearlymussel (*Lexingtonia dolabelloides*) was being conducted. (The slabside pearlymussel has not been included in this proposed rule. Additional populations of this species were discovered and further evaluation is needed before a decision can be made regarding the species' need for Federal protection.)

Seven agencies responded to the August 25, 1992, notification. The U.S. Soil Conservation Service stated: "It is not anticipated that any planned or current activities will adversely affect these species or their habitat." The Kentucky State Nature Preserve Commission, the Kentucky Department of Environmental Protection, Tennessee Wildlife Resources Agency, Virginia Department of Conservation and Recreation, and Virginia Department of Game and Inland Fisheries provided information on the decline and status of the species in their States.

The Duck River Agency (DRA) provided comments on the status of the oyster mussel in the Duck River. It stated that as the Duck River population of the oyster mussel is extremely small, it is believed highly unlikely that the stream supports a viable population of *E. capsaeformis*. In contrast to DRA's statement, Don Hubbs (Tennessee Wildlife Resources Agency, *in litt.*, 1992) stated that fresh dead oyster mussel individuals (from young and older cohorts) were not uncommon in muskrat middens on the Duck River in Marshall County, Tennessee. The Service, however, currently has insufficient information to judge the

species' long-term viability either in the Duck River or on a range-wide basis.

The DRA took issue with the Service's statement in the notification that the proposed Columbia Dam on the Duck River could eliminate the oyster mussel from the Duck River. It stated that current project alternatives under consideration by the DRA and TVA could result in a project that would flood less than one third of the area and would enhance the future viability of the population segment above the pool. The Service agrees that a smaller Columbia Dam pool would reduce the amount of the oyster mussel population lost to the direct effects of the dam. However, the details of these Columbia Dam alternatives have not been provided to the Service. Thus, the Service stands by its statement that the Columbia Dam project as presently planned could eliminate the oyster mussel from the Duck River.

The DRA commented that statements in the mussel species accounts (Gordon 1991) that were used as an information source to prepare the August 25, 1992, notification, contained language that appeared to indicate that the Service had already made a decision to list the species prior to receiving any comments from the notification. The Service agrees that the species accounts, which were prepared by a non-Service biologist under contract to the Service, contain language regarding the need to reverse the species' decline as a means to preserve and recover the mussels. However, these statements, made by a Service contractor, do not represent a predecisional statement by the Service. Statements in the species accounts will be considered along with all presently available information on these species, as well as information obtained through the notification and this proposed rule when making the final decision regarding the status of the species.

#### Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR Part 424) promulgated to implement the listing provisions of the Act set forth the procedures for adding species to the Federal lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in Section 4(a)(1). These factors and their application to the Cumberland elktoe (*Alasmidonta atropurpurea*), oyster mussel (*Epioblasma capsaeformis*), Cumberlandian combshell (*Epioblasma brevidens*), purple bean (*Villosa perpurpurea*), and rough rabbitsfoot

(*Quadrula cylindrica strigillata*) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Mussel populations throughout the Central and Eastern United States have been declining since modern civilization began to significantly alter aquatic habitats. The Ohio River drainage, which includes the Tennessee and Cumberland Rivers, was a center for freshwater mussel evolution and historically contained about 127 distinct mussel species and subspecies. Of this once rich mussel fauna, 11 mussels are extinct, 28 mussels are classified as Federal endangered species, and 18 others, including the 5 species covered in this proposed rule, are candidates for addition to the Federal List of Endangered and Threatened Wildlife. In less than 100 years, 44 percent of the Ohio River system's mussel fauna has either become extinct, recognized as endangered, or decimated to the point that Federal protection is being considered. No other wide-ranging faunal group in the continental United States has experienced this degree of loss within the last 100 years.

The mussel fauna in most streams of the Ohio River basin has been directly impacted by impoundments, siltation, channelization, and water pollution. Reservoir construction is the most obvious cause of the loss of mussel diversity in the basin's larger rivers. Most of the main stem of both the Tennessee and Cumberland River and many of their tributaries are impounded. For example: over 2,300 river miles or about 20 percent of the Tennessee River and its tributaries with drainage areas of 25 square miles or greater are impounded (Tennessee Valley Authority 1971). In addition to the loss of riverine habitat within impoundments, most impoundments also seriously alter downstream aquatic habitat; and mussel populations upstream of reservoirs may be adversely affected by changes in the fish fauna essential to a mussel's reproductive cycle.

Coal mining related siltation and associated toxic runoff have adversely impacted many stream reaches. Numerous streams have experienced mussel and fish kills from toxic chemical spills, and poor land use practices have fouled many waters with silt. Runoff from large urban areas has degraded water and substrate quality. Because of the extent of habitat destruction, the overall aquatic faunal diversity in many of the basins' rivers has declined significantly. Because of this destruction of riverine habitat, 8

fishes and 24 mussels in the Tennessee and Cumberland River basins have already required Endangered Species Act protection, and numerous other aquatic species in these two basins are currently considered candidates for Federal listing.

The mussel fauna in the Tennessee and Cumberland Rivers has been extensively sampled, and much is known about the historic and present distribution of this rich fauna. Gordon (1991) provided an extensive review of the literature regarding the past and present ranges of the Cumberland elktote, oyster mussel, Cumberlandian combshell, purple bean, and rough rabbitsfoot. Based on Gordon's (1991) review and personal communication with numerous Federal, State, and independent biologists, it is clear that these five mussel species have undergone significant reductions in range and that they now exist as only remnant isolated populations. (See "Background" section for a discussion of current and historic distribution and threats to the remaining populations.)

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* These five mussels are not commercially valuable; but as they are extremely rare, they could be sought by collectors. The specific areas inhabited by these species are presently unknown to the general public. As a result, their overutilization has not been a problem. However, vandalism could pose a problem, especially if specific inhabited reaches were to be revealed through the often controversial critical habitat designation process. Most stream reaches inhabited by these mussels are extremely small. Thus, populations of the species could be easily eliminated or significantly reduced using readily available toxic chemicals. Although scientific collecting is not presently identified as a threat, take by private and institutional collectors could pose a threat if left unregulated. Federal protection of these species will help to minimize illegal and inappropriate take. (See "Critical Habitat" section for a discussion of why critical habitat is not being considered for these species.)

C. *Disease and predation.* Disease occurrence in freshwater mussels is virtually unknown. However, since 1982, biologists and commercial mussel fishermen have reported extensive mussel die-offs in rivers and lakes throughout the United States. The cause(s) of many of these die-offs is unknown, but disease has been suggested as a possible factor.

Shells of all five species are often found in muskrat middens. The species are also presumably consumed by other

mammals, such as raccoons and mink. While predation is not thought to be a significant threat to a healthy mussel population, Neves and Odum (1989) suggest it could limit the recovery of endangered mussel species or contribute to the local extirpation of already depleted mussel populations. Predation would be of particular concern to oyster mussel, Cumberlandian combshell, and purple bean, which exist only as extremely small, remnant populations.

D. *The inadequacy of existing regulatory mechanisms.* The States of Kentucky, Alabama, Tennessee, and Virginia prohibit the taking of fish and wildlife, including freshwater mussels, for scientific purposes without a State collecting permit. However, enforcement of this permit requirement is difficult. Also, State regulations do not generally protect these mussels from other threats. Existing authorities available to protect aquatic systems, such as the Clean Water Act, administered by the Environmental Protection Agency (EPA) and the Army Corps of Engineers, have not been fully utilized and may have led to the degradation of aquatic environments in the Southeast Region, thus resulting in a decline of aquatic species. As these mussels (Cumberland elktote, Cumberlandian combshell, oyster mussel, purple bean, and rough rabbitsfoot) coexist with other federally listed species throughout most or all of their range, some of the habitats of these species are indirectly provided some Federal protection from Federal actions and activities through Section 7 of the Act. Federal listing will provide additional protection for all five species throughout their range by requiring Federal permits to take the species and by requiring Federal agencies to consult with the Service when activities they fund, authorize, or carry out may specifically adversely affect these species. Further, listing will require consultation with the EPA in relationship to water quality criteria, standards, and National Pollution Discharge Elimination System permits under the Clean Water Act; and implementation of actions to recover the species.

E. *Other natural or manmade factors affecting its continued existence.* The populations of these species (Cumberland elktote, oyster mussel, Cumberlandian combshell, purple bean, and rough rabbitsfoot) are small and geographically isolated. This isolation prohibits the natural interchange of genetic material between populations, and the small population sizes reduce the reservoir of genetic variability within the populations. It is likely that

some of the populations of the Cumberland elktoe, oyster mussel, Cumberlandian combshell, purple bean and rough rabbitsfoot may be below the level required to maintain long-term genetic viability. Also, because most of the extant populations of these mussels are restricted to short river reaches, they are very vulnerable to extirpation from a single catastrophic event, such as a toxic chemical spill or a major stream channel modification. Because the populations of each species are isolated from one another because of impoundments, natural repopulation of any extirpated population is impossible without human intervention.

The invasion of the exotic zebra mussel (*Dreissena polymorpha*) into the Great Lakes poses a potential threat to the Ohio River's mussel fauna. The zebra mussel has recently been reported from the Tennessee and Cumberland Rivers, but the extent of its impact on the basin's freshwater mussels is unknown. However, zebra mussels in the Great Lakes have been found attached in large numbers to the shells of live and freshly dead native mussels, and zebra mussels have been implicated in the loss of entire mussel beds.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by these mussels in determining to propose these rules. Based on these evaluations, the preferred action is to propose the Cumberland elktoe (*Alasmidonta atropurpurea*), oyster mussel *Epioblasma capsaeformis*, Cumberlandian combshell *Epioblasma brevidens*, purple bean *Villosa perpurpurea*, and rough rabbitsfoot *Quadrula cylindrica strigillata* for Federal protection. The Cumberland elktoe, purple bean, and rough rabbitsfoot are known from three populations each, and the Cumberland combshell and oyster mussel are known from five populations each. These five species and their habitat have been and continue to be impacted by habitat destruction and range reduction. Their limited distribution also makes them very vulnerable to possible extinction from toxic chemical spills. Because of their restricted distributions and their vulnerability to extinction, endangered status appears to be the most appropriate classification for these species. (See "Critical Habitat" section for a discussion of why critical habitat is not being proposed for these mussels.)

#### Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that, to the maximum extent prudent and determinable, the

Secretary designate critical habitat at the time the species is determined to be endangered or threatened. The Service's regulations (50 CFR 424.12(a)(1)) state that designation of critical habitat is not prudent when one or both of the following situations exist: (1) the species is threatened by taking or other activity and the identification of critical habitat can be expected to increase the degree of threat to the species or (2) such designation of critical habitat would not be beneficial to the species. The Service finds that designation of critical habitat is not presently prudent for these species. Such a determination would result in no known benefit to these species, and designation of critical habitat could pose a further threat to them.

Section 7(a)(2) and regulations codified at 50 CFR Part 402 require Federal agencies to ensure, in consultation with and with the assistance of the Service, that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species or destroy or adversely modify their critical habitat, if designated. Section 7(a)(4) requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in the destruction or adverse modification of proposed critical habitat. (See "Available Conservation Measures" section for a further discussion of Section 7.) As part of the development of this proposed rule, Federal and State agencies were notified of the mussels' general distributions, and they were requested to provide data on proposed Federal actions that might adversely affect the species. Should any future projects be proposed in areas inhabited by these mussels, the involved Federal agency will already have the general distributional data needed to determine if the species may be impacted by its action; and if needed, more specific distributional information would be provided.

Each of these mussels occupies very restricted stream reaches. Thus, as any significant adverse modification or destruction of these species' habitat would likely jeopardize their continued existence, no additional protection for the species would accrue from critical habitat designation that would not also accrue from listing these species. Therefore, habitat protection for these species would be accomplished through the Section 7 jeopardy standard and Section 9 prohibitions against take.

In addition, these mussels are rare, and taking for scientific purposes and private collection could pose a threat if

specific site information were released. The publication of critical habitat maps in the *Federal Register*, local newspapers, and other publicity accompanying critical habitat designation could increase the collection threat and increase the potential for vandalism especially during the often controversial critical habitat designation process. (See "Summary of Factors Affecting the Species, Part B. Overutilization for commercial, recreational, scientific, or educational purposes" section for a further discussion of threats to the species from vandals.) The locations of populations of these species have consequently been described only in general terms in these proposed rules. Any existing precise locality data would be available to appropriate Federal, State, and local governmental agencies from the following offices: Service office described in the ADDRESSES section; the Service's Cookeville Field Office, 446 Neal Street, Cookeville, Tennessee 38501; and White Marsh Field Office, P.O. Box 480, Mid-County Center, U.S. Route 17, White Marsh, Virginia 23183; and from the Kentucky Department of Fish and Wildlife Resources, the Kentucky State Nature Preserves Commission, the Tennessee Wildlife Resources Agency, the Tennessee Department of Conservation, the Virginia Department of Game and Inland Fisheries, and the Virginia Department of Conservation and Recreation.

#### Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402. Section 7(a)(4) requires Federal agencies to confer informally with the

Service on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, Section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

The Service notified Federal agencies that may have programs which could affect these species. One major Federal project, a proposed Tennessee Valley Authority impoundment on the Duck River, Columbia, Tennessee, could have a significant impact on the oyster mussel. Construction of Columbia Dam was halted in the late 1970's after the Service issued a biological opinion stating that the dam's completion would likely jeopardize the continued existence of two federally listed mussels. (A third mussel listed prior to the issuance of the biological opinion is now known from the proposed flood pool.) Although the presence of a fourth endangered mussel (oyster mussel) may somewhat complicate this issue, any measures needed to avoid a jeopardy situation for the currently listed mussels would not be expected to change significantly with the addition of a fourth listed species.

An impoundment is under consideration on the North Prong of Clear Fork Creek in the upper Big South Fork of the Cumberland River, Fentress County, Tennessee. This project would inundate and adversely impact a portion of the Cumberland elktoe population that exists in the upper Big South Fork basin. This water supply project, proposed by the Fentress County Utility District, is one of a series of water supply alternatives currently under review for a permit pursuant to Section 404 of the Clean Water Act.

No other specific proposed Federal actions were identified that would likely affect any of the species. Federal activities that could occur and impact the species include, but are not limited to, the carrying out or the issuance of permits for reservoir construction, stream alterations, wastewater facility development, pesticide registration, coal mining, and road and bridge construction. It has been the experience of the Service, however, that nearly all Section 7 consultations have been resolved so that the species has been

protected and the project objectives have been met.

The Act and implementing regulations found at 50 CFR 17.21 set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, or collect; or to attempt any of these), import or export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and/or for incidental take in connection with otherwise lawful activities.

#### Public Comments Solicited

The Service intends that any final action resulting from these proposals will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning these proposed rules are hereby solicited. Comments particularly are sought concerning:

- (1) biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to the species;
- (2) the location of any additional populations of the species and the reasons why any habitat should or should not be determined to be critical habitat as provided by Section 4 of the Act;
- (3) additional information concerning the range, distribution, and population size of the species; and
- (4) current or planned activities in the subject areas and their possible impacts on the species.

Final promulgation of the regulations on these species will take into consideration the comments and any additional information received by the Service, and such communications may lead to final regulations that differ from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if

requested. Requests must be received within 45 days of the date of publication of this proposal. Such requests must be made in writing and addressed to the Field Supervisor, U.S. Fish and Wildlife Service, Asheville Field Office, 330 Ridgefield Court, Asheville, North Carolina 28806.

#### National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to Section 4(a) of the Act. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

#### References Cited

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#### Author

The primary author of this proposed rule is Richard G. Biggins, U.S. Fish and Wildlife Service, Asheville Field Office, 330 Ridgefield Court, Asheville, North Carolina 28806 (704/665-1195, Ext. 228).

#### List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and

recordkeeping requirements, and Transportation.

#### Proposed Regulation Promulgation

#### PART 17—[AMENDED]

Accordingly, the Service proposes to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. § 17.11(h) is amended by adding the following, in alphabetical order under CLAMS, to the List of Endangered and Threatened Wildlife:

§ 17.11 Endangered and threatened wildlife.

\* \* \*

(h) \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
CLAMS							
Bean, purple .....	<i>Villosa perpurpurea</i> ..	U.S.A. (TN, VA) .....	E .....			NA	NA
Combshell, Cumberlandian.	<i>Epioblasma brevidens</i> .	U.S.A. (AL, KY, TN, VA).		NA	E		
Elktoe, Cumberland ..	<i>Alasmodonta atropurpurea</i> .	U.S.A. (KY, TN) .....		NA	E		
Mussel, oyster .....	<i>Epioblasma capsaeformis</i> .	U.S.A. (AL, KY, TN, VA).		NA	E		
Rabbitsfoot, rough ....	<i>Quadrula cylindrica strigillata</i> .	U.S.A. (TN, VA) .....		NA	E		

Dated: June 30, 1994.

Mollie H. Beattie,

Director, Fish and Wildlife Service.

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